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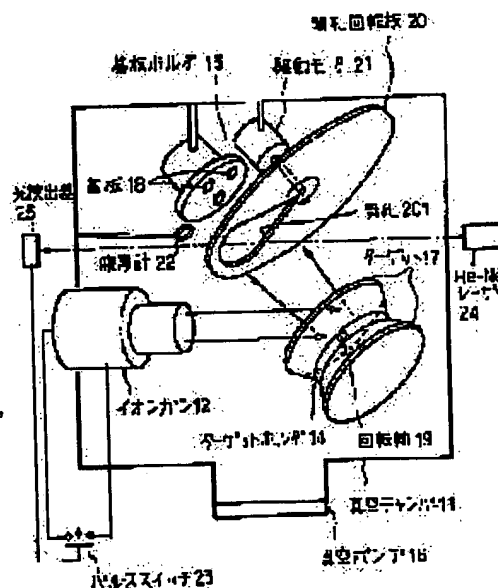
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## (54) ION BEAM SPUTTERING SYSTEM

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To provide an ion beam sputtering system in which only sputtering particles having a low energy of about several eV are selected from sputtering particles, and film is formed by these low energy sputtering particles.

**SOLUTION:** In an ion beam sputtering system composed of a vacuum chamber 11, an ion gun 12 set at the bottom part of the vacuum chamber, a target holder 14 supportingly fixed in the upper direction oppositely to the ion gun by a rotary shaft 19 inserted via the side wall of the vacuum chamber, a substrate holder 13 to which the substrate 18 in which this coating is to be formed is attached and detached, a shutter 20 set in the vicinity of the front part of the substrate holder and a vacuum pump 16 sucking and exhausting the inside of the vacuum chamber, low energy sputtering particles are selected to form thin film.



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